

CERTIFICATE IN COMPUTER PROGRAMMING

lists, trees, and hash tables. The elective course allows the student to learn about software engineering, web programming, mobile device programming, or user interface design.

Professional Certificate - Computer Programming

College Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	10
Elective Courses	3-4
Total Hours	13-14

Required Courses

Rule: Student must complete the following courses

Note: Students may take either CSCI 135 or CSCI 250 to meet the requirement.

CSCI 135	Fund of Computer Science I	3
or CSCI 250	Computer Mdlng/Science Majors	
CSCI 136	Fund of Computer Science II	3
CSCI 232	Data Structures and Algorithms	4
Total Hours		10

Minimum Required Grade: C-

Elective Courses

Rule: Students must complete one of the following courses

Select one of the following:		3-4
CSCI 205	Programming Languages w/ C/C++	
CSCI 323	Software Science	
CSCI 340	Database Design	
CSCI 411	Advanced Web Programming	
CSCI 412	Game and Mobile App	
CSCI 443	User Interface Design	
Total Hours		3-4

Minimum Required Grade: C-

Programming is an essential skill for solving problems in many fields. Programming gives maximum flexibility in processing and understanding data, constructing computational models, and building user friendly applications. Programming skills are in high demand in the marketplace. Completing this certificate could be the first step towards a career that involves software development.

Students will apply object-oriented principles to develop software systems. Students will learn to apply and program data structures like